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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,055	10/12/2001	Kazuhiro Murakami	06753.0472	1009

7590 04/20/2004

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EXAMINER

NGUYEN, CHAU N

ART UNIT	PAPER NUMBER
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2831

DATE MAILED: 04/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/975,055

Applicant(s)

MURAKAMI ET AL.

Examiner

Chau N Nguyen

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-6 and 8-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-6 and 8-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 2-4 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tournier et al. (5,499,448) in view of Brumbach et al. (3,042,737).

Tournier et al. discloses a structure for mounting a terminal to a covered electric wire, comprising a terminal (10) comprising a cylindrical wire end receiving portion (10b) and a cylindrical connecting portion (the portion after the flange 18) for connecting to other equipment, a covered electric wire (12) from which a leading end of a covering (16) is removed to expose a leading end of an electric conductor, the wire end receiving portion receiving the leading end of the exposed electric conductor of the covered electric wire and a part of the covering, and the wire end receiving portion being uniformly compressed around substantially the entire periphery thereof to be in close contact with the exposed electric conductor (Figs 2A-2G) (re claims 2 and 9). Tournier et al. also discloses an outer shape of the wire end receiving portion having a cylindrical shape, the wire end receiving portion being compressed around an outer portion (re claim 3), and an outward protruding flange (18) on the terminal (re claims 8 and 10). Re claim 4, the feature of the wire end receiving portion being further extended in an axial direction due to plastic deformation is inherent from the structure of Tournier et al. In other words, because the receiving portion is compressed radially, its axial length would be slightly extended.

Tournier et al. does not disclose an inner surface of the wire end receiving portion comprising a plurality of projections (re claims 2 and 9). Brumbach et al.

discloses a terminal (Fig. 5) comprising a wire receiving end portion whose inner surface is provided with a plurality of projections. It would have been obvious to one skilled in the art to include the projections as taught by Brumbach et al. in the inner surface of the Tournier et al. wire receiving end portion for gripping engagement with the covered wire.

4. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tournier et al. (5,408,743) in view of Brumbach et al.

Tournier et al. discloses (Figs 1 and 2) a structure and an inherent method for mounting a terminal to a covered electric wire, comprising removing a front end of a covering on the covered electric wire to expose a leading end of an electric conductor, receiving the leading end of the electric conductor and a part of the covering in a cylindrical wire end receiving portion of a terminal, and uniformly compressing the cylindrical wire end receiving portion around the entire circumference in a radial direction so that the cylindrical wire end receiving portion and at least a portion of the leading end of the electric conductor plastically deform (re claim 5). Tournier et al. does not disclose a plurality of annular projections on the inner surface of the wire end receiving portion contacting the part of the covering of the covered electric wire (re claim 5). Brumbach et al.

discloses a terminal (Figs 5 and 6) comprising a wire receiving end portion whose inner surface is provided with a plurality of projections. It would have been obvious to one skilled in the art to include the projections as taught by Brumbach et al. in the inner surface of the Tournier et al. wire receiving end portion for gripping engagement with the part of the covering of the covered wire. Re claim 6, Although not disclosed by Tournier et al., it would have been obvious to one skilled in the art to use a swaging machine to generate the compression in the structure of Tournier et al. since using a swaging machine to make electrical contact between a terminal and a wire by compression is well-known in the art.

5. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tournier et al. ('448) in view of Brumbach et al. as applied to claim 9 above, and further in view of McGrane (4,959,508).

Claim 11 additionally recites the cylindrical connecting portion comprising a hollow interior for connecting to other equipment. McGrane discloses a terminal comprising a wire end receiving portion and a cylindrical connection portion (the right hand side of the terminal) which is comprised of a hollow interior. It would have been obvious to one skilled in the art to modify the cylindrical connection portion of Tournier et al. to have a hollow interior to provide an electrical

connection between the covered electric wire with another electric wire as taught by McGrane.

Response to Arguments

6. Applicant's arguments with respect to claims 2, 5 and 9 have been considered but are moot in view of the new ground(s) of rejection except for the following.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation to do so is found in the references themselves.

Specifically, Brumbach et al. does teach that the projections 26a are used to provide a gripping engagement with a material of an outer sheath (col. 3, lines 32-34). In response to applicant's argument that the combination of the two references does not establish a *prima facie* case of obviousness, it has been held that the

examiner's burden of establishing *prima facie* obviousness is satisfied by a showing of structural similarity between the claims and prior art; it does not require a showing of some suggestion or expectation in the prior art that the structurally similar subject matter will have the same or a similar utility as that discovered by the applicant. *In re Dillon*, 16 USPQ 2d 1897. In response to applicant's argument that Tournier et al. teaches a connection using crimping or swaging, while Brumbach et al. teaches a connection where a ferrule is threaded onto an end of a sheath, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Moreover, Brumbach et al. is used only to support the position of providing projections in an inner surface of a terminal to provide a gripping engagement between an outer sheath of a wire and the terminal, therefore Brumbach et al. does not have to disclose a connection using crimping or swaging. Applicant also argues that Brumbach et al. discloses spiral threads not a plurality of annular projections. This argument is not found persuasive. Although Brumbach et al. calls the elements 26a "the threads", these

elements are ringlike segments provided on the inner surface of the terminal, see Figures 5 and 6.

Summary

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N Nguyen whose telephone number is 571-272-1980. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Chau N Nguyen
Primary Examiner
Art Unit 2831